GTA 55-03-030 For Official Use Only HMMWV UPARMORED ROLLOVER Emergency Procedures Performance Measures WARNING

Never attempt to jump from a rolling vehicle. It may roll over you. Ensure that the vehicle has stopped rolling before exiting. Upon complete evacuation of the crew, vehicle should be inspected for fire hazards such as leaking oil, fuel, ammunition and hydraulic fluid. If hazardous / explosive materials are involved, driver must take actions according to the DD Form 836 accompanying load. Notify rescue personnel and remain at evacuation distance while securing accident site.

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ROLLOVER DRILL TASK STEPS AND PERFORMANCE MEASURES:

NOTE - All personnel will use seat restraints!

1. Execute Rollover Drill (not in water):

a. Driver

- Releases the accelerator, plants feet flat on the floor and attempts to maintain control of steering.
- (2) Yells "Rollover, Rollover, Rollover!"
- (3) Keeps hands on the steering wheel, tucks chin into chest, and braces for impact.

b. Vehicle Commander and Crew

- (1) Yells, "Rollover, Rollover, Rollover!"
- (2) Pulls Gunner into cab.
- (3) Tucks chin into chest, plants feet firmly on the floor and braces for impact, while holding onto the gunner.

PREVENTIVE MEASURES:

Wear seatbelts. Survive the rollover!

Slow Down. Watch for Sharp Curves and Steep Slopes. Curves and slopes generate centrifugal forces that act sideways on the vehicle, increasing the chance of rollover.

Avoid Panic. Don't jerk the steering wheel. Many rollovers occur when the driver panics / jerks the steering wheel during an emergency. Jerking the steering wheel can cause loss of control and the vehicle may slide sideways and roll over.

Know proper maneuvering. If you drive off the roadway, gradually reduce speed. Ease your vehicle back onto the roadway at a safe speed.

Use caution on rural roads / roads with soft or no shoulders. When a vehicle goes off a road, the vehicle can overturn when it strikes a ditch or embankment, or is tripped by soft soil.

Pay attention to vehicle condition, tire pressure and loading:

- Pay particular attention to the tire condition and air pressure during PMCS to reduce potential hazards. Worn, improperly inflated tires increase your risk of rollover.
- Don't overload the vehicle. Example, the M1114 payload is 2300 lbs: this includes the passengers, winch, gunner's protection kit, spare tire, weapons, and all cargo!
- Keep the Vehicle Center of Gravity Low. Load heavier items low in the vehicle. Increasing the height of the vehicle's center of gravity increases your risk of rollover.
- Secure the Load. Improperly secured loads can shift and become hazards within the vehicle and increase the chance of rollover.
- Trailer Towing. Vehicles towing trailers have a higher risk of rolling over, especially in curves and during sudden steering maneuvers, as a result of the exaggerated motion of the trailer. Adjust speed accordingly.

Work As a Team: Maintain Crew Integrity – train as a team

Communicate with the driver.

Tell the driver what is to the left, right, rear, and overhead. Your gunner is your eyes and ears! The gunner may be the only crew member capable of seeing around the entire vehicle. Use the vehicle intercom system to pass visual information to the driver, but rehearse shouted voice commands and hand signals in case the intercom fails. Avoid hazards, use a ground guide whenever possible.

Use combat locks safely.

Combat locks help keep the doors closed in a crash, but are a hazard near water! Unlock combat door locks when near water (enemy situation permitting).

Know how to get out.

Rehearse vehicle evacuation as if only one exit is available.

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c. Gunner

- (1) Yells, "Rollover, Rollover, Rollover!"
- (2) Drops down into vehicle.

2. After the rollover has stopped:

a. Driver, VC and rear crew:

(4) Slides out of seat.

(9) Exits with weapon.

(5) Disconnects headset.

(1) Driver turns off motor.

(2) Braces one hand on ceiling.

both hands on ceiling.

(6) Orients self to nearest door.

(7) Unlocks combat door locks.

(8) Gets door open: if door does

not open, tries a different door.

(3) Unbuckles seatbelt with other

hand and immediately puts

(3) Tucks chin into chest, holds onto a stationary object, and braces for impact.

(10) Assists crew to exit.

- (11) Establishes security.
- (12) Recovers sensitive items.
- (13) Provides first aid.
- (14) Assists in vehicle recovery.

b. Gunner

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- (1) Disconnects headset.
- (2) Orients self to nearest door.
- (3) Unlocks combat door locks.
- (4) Gets door open: if door does not open, tries different door.
- (5) Exits with weapon.
- (6) Assists crew to exit.
- (7) Establishes security.
- (8) Recovers sensitive items.
- (9) Provides first aid.
- (10) Assists in vehicle recovery.

If vehicle rolls onto side:

a. Soldier in lower position, if able:

- (1) Unbuckles seat belts.
- (2) Assists Soldiers in higher positions to release seat belts and lower carefully.

b. Crew, if doors are jammed:

- (1) Exits thru hatch or cargo area if possible.
- (2) Works as a team to open jammed doors.



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HMMWV Water Egress Task and Performance Measures

Note: Combat door locks on the M1114 Uparmored HMMWV are designed to keep the enemy out. When they are locked, it is extremely difficult for rescuers to enter the vehicle! This problem may be compounded if damage occurs to the door as a result of an accident. Commanders should determine when combat locks should be used while conducting operations near bodies of water.

M1114 Data:

Curb Weight: 9,800 Lbs / 4,447 kg Payload: 2,300 Lbs / 1,043 kg Gross Weight: 12,100 Lbs / 5,489 kg Max Towed Load: 4,200 Lbs / 3,175 kg

Max safe speed depends on surface conditions, use your head!

RESCUE WRENCH For M1114 UAH

PREVENTIVE MEASURES:

Always wear your seat belt to survive water entry and maintain orientation during a rollover.

When in the vicinity of water and tactical conditions permit:

- 1. Reduce speed and bring vehicle to a halt.
- 2. Inform vehicle crew that you are operating around water hazards.
- 3. Assess terrain and route for hazards and discuss risk mitigating measures with crew before proceeding.
- 4. Unlock combat door locks.

When water entry is imminent:

a. Driver

- Releases the accelerator, and controls the entry by steering into the body of water.
- (2) Yells "Water!"
- (3) Keeps hands on the steering wheel with extended but not locked arms, tucks head and chin into chest and braces for impact.

b. Gunner

- (1) Yells "Water!"
- (2) Pushes / pulls self down into vehicle.
- (3) Tucks head and chin into chest and holding onto a stationary object, braces for impact.

c. All other crew members

- (1) Yells "Water!"
- (2) Pulls the gunner into the cab.
- (3) Tucks head and chin into chest and braces for impact.
- (4) Plants feet firmly on the floor while holding onto a stationary object.

When the vehicle is stabilized

All Crew

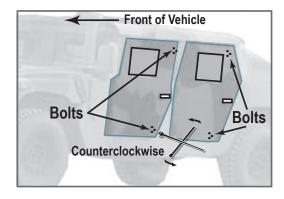
- (1) Driver turns off motor.
- (2) Disconnects headset.
- (3) Releases seatbelts; uses caution if upside down.
- (4) Exits the vehicle.
- (5) Assesses injuries.
- (6) Assists crew to exit and secure weapons.
- (7) Decides to remove personal equipment.
- (8) Gets to safest shore.
- (9) Establishes security.
- (10) Accounts for crew members.
- (11) Provides first aid.
- (12) Recovers weapons, ammunition and sensitive items.
- (13) Assists in vehicle recovery.

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WATER RESCUE / RECOVERY:

- Remove emergency rescue wrench from storage position.
- 2. Identify door that allows immediate access to conscious occupants.
- 3. Locate two groups of three bolts at the rear of each door.
 - **Note:** One bolt protrudes in each group.
- 4. Remove countersunk bolts first then the protruding one. Complete one group at a time. **Note:** If bolt head breaks proceed to the next bolt, the door can still be opened.
- 5. Open door with handle.
- 6. Proceed to next door.



- 1. Secure the accident site.
- 2. Stay in contact with the vehicle, hold onto the vehicle and kick / swim to high point in buddy teams.
- 3. Rescuers tie a rope / cable to the vehicle to aid in rescue.
- 4. Open doors and hatches.
- If doors and hatches are not accessible, rescuers must immediately use all available means to turn the vehicle on it's side to gain access to the turret.
- 6. Seek out the highest point on / in the vehicle.
- 7. Ensure that all survivors have air and are able to breathe.
- 8. Check for other injuries and apply first aid.
- 9. Carefully move injured personnel to the highest point on the vehicle.
- 10. Remove excess equipment, to include body armor in deep water.
- 11. Evacuate from vehicle high point to safest location, depending on:
 - Enemy situation.
 - Water level and flow.
 - Water temperature.
 - Distance to waters edge.

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MEDEVAC Request:

- Line 1: 6-digit UTM grid location of pick-up site.
- Line 2: Radio frequency, call sign and suffix of requesting personnel.
- Line 3: Number of patients by precedence:
 Urgent, Priority, Routine.
 Urgent loss of life or limb within 2 hours.
 Priority loss of life or limb within 4 hours.
 Routine evacuation within 24 hours.
- Line 4: Special equipment required. As applicable, express either none, hoist, or stokes litter.
- Line 5: # of patients by type (litter / ambulatory).
- Line 6: Security of pick-up site (What possible/known threat is in the area?).
- Line 7: Method of marking pick—up site (near / far recognition devices).
- Line 8: Patient nationality and status (Coalition Military, US Contractor, non-US Contractor, EPW).
- Line 9: NBC Contamination.

REPORT THE INCIDENT/ACCIDENT:

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1. Who (Unit, Individual)?

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- 2. What (Accident or Combat)?
- 3. Where (6-digit UTM grid)?
- 4. How (What caused the rollover, speed, visibility, cause of injuries or death)?
- 5. Follow up initial report ASAP with information regarding:
 - a. Weather conditions.
- b. Seatbelts worn by each occupant.
- c. Fatigue / sleep prior to the accident.
- d. Was the driver able to see the hazard/other vehicle?
- e. Operator training / experience / license.
- Complete Accident Report Form (DA Form 285 AGR) and forward to higher HQs.

Information provided by:

U.S. Army Transportation School Army Driver Standardization Office (ADSO) 705 Read Street Ft Eustis, VA 23604

Anticipation of rescue.
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